

## Podcast by Windsor & Royal Borough Museum

### The Battle of Britain- 80 years on

**Becky:** Hello and welcome to the Windsor & Royal Borough Museum's podcast to mark the 80<sup>th</sup> anniversary of the Battle of Britain. We will be talking to special guests and sharing clips from our oral history collection to help us reflect on events 80 years ago.

#### [Music]

On the 15<sup>th</sup> September 1940, the last major engagement of the Battle of Britain took place, with the German Luftwaffe launching its largest bombing attack to date over the South East of England. By the end of the day, the Royal Air Force Fighter Command had prevented the Luftwaffe from gaining dominance over the British skies, forcing Germany to halt its plans to invade Britain. Now, as we mark the 80<sup>th</sup> anniversary of that day, we will tell you the story of how Sir Sydney Camm, a local man born in Windsor, helped to enable this decisive British victory. But first we will begin with a recap of what happened during the Battle which led to Germany's first major defeat during the Second World War.

#### [music]

The Battle of Britain began in July 1940 and followed the evacuation of Dunkirk and the Fall of France which had taken place the previous month. Britain was now alone in its fight against Nazi Germany but refused to negotiate peace terms. Consequently, Hitler ordered the invasion of Britain- code named Operation Sealion. The first step in his plan was for the Luftwaffe to gain control of the air space over the English Channel to prevent the RAF from being able to attack German invasion barges.

Initially, the Luftwaffe attacked the Strait of Dover in an attempt to draw the RAF out into a full-scale battle. But by the end of July, the RAF had lost 150 aircraft while the Luftwaffe had lost 268. In August, the Luftwaffe began attacking airfields, operation rooms and radar stations with the hope of defeating the RAF on the ground. Intense battles between the RAF and the Luftwaffe dominated Britain's South East skyline for the next two months.

The heavy losses inflicted on the Luftwaffe forced it to end its campaign of daytime strategic bombing and the plan to invade Britain was indefinitely put on hold. The Luftwaffe instead began a campaign of night-time bombing to try and break the morale of the British people and force a surrender. This became known as the Blitz and many cities across the Country were heavily bombed

## Podcast by Windsor & Royal Borough Museum

causing mass destruction and a terrible loss of life. Yet, Britain had succeeded in stopping an imminent invasion.

Numerous factors combined to enable Britain's victory in the skies. There was a series of strategic errors made by the Luftwaffe, including not identifying the importance of radar bases, but that is not to take away from the superior strategies of the RAF. A cohesive air defensive system in Britain which effectively filtered RADAR intelligence through the Dowding system meant RAF fighter planes could lie in wait for enemy aircraft. The RAF also had a faster production rate of planes compared to the Luftwaffe, meaning lost or damaged aircraft could be quickly replaced. And another major advantage the RAF had was its superior design of planes- the Hurricane and Spitfires. It is on that note, I will introduce local man, Sir Sydney Camm.

Born in Windsor in 1893, Camm went on to be one of Britain's most distinguished Aircraft designers. Perhaps most notably, whilst Chief Designer at Hawker Aircraft, he designed the Hawker Hurricane fighter plane, which first entered service with the RAF in 1937.

The Hurricane was used by the Royal Air Force for the duration of the Second World War and played a vital role in the Battle of Britain. Hurricanes destroyed more enemy aircraft during the Battle than all the other air and ground defences combined. In fact, it was responsible for shooting down 4/5ths of enemy aircrafts during the Battle.

The Hurricane was partly made of wood and had a fabric covering, allowing it to be easily repaired. It contained a Merlin engine and a retractable undercarriage. Sydney Camm continuously reviewed the design of the Hurricane and at the height of the Battle of Britain it could reach a maximum speed of more than 342 mph.

Many have called the Hurricane the backbone of the RAF's fleet during the war, but who was the man behind the design?

To find out, I spoke to Bob Ambrose. Formerly of the RAF, Bob grew up in Slough and attended Windsor County Boy's School. He is part of the Sir Sydney Camm Commemorative Society and has spent many years researching Sydney Camm.

**Bob:** Hi, well Sydney Camm is one of Britain's certainly most distinguished aircraft designers of all time. He was born in 1893 and in his school days he showed a keen interest in aviation, aeroplanes generally which of course then they were made of wood and fabric. So different from today. He founded a

## Podcast by Windsor & Royal Borough Museum

Windsor model aeroplane club. They made their planes with wood and paper and stuff like that. He constructed many successful models. He actually lived at number 10 Alma Rd with his brothers and sisters- 10 of them altogether. One of his other brothers Fred went on to become an editor of a practical series of magazines, practical woodwork, practical engineering and, I don't know, practical photography- it's interesting. He was also a pupil at the Royal Free School in Bachelors Acre. He left school in 1908. Camm's father was an excellent carpenter and joiner. He must have instilled in Sydney the hard work and accuracy and quality. Any case he then used to spend hours whittling propellers and model aeroplanes. You can imagine any spare time he had he was making aeroplanes and that's interesting right from the very word go. All the brothers became sufficiently competent in building model aeroplanes, so they made a little business of it by supplying the model planes for people to fly with elastic bands. Of course, when I was a kid that's all we had elastic bands- great fun. In Eton High Street they used to have a shop where they actually started to supply them, so a little business started with the Camm's model aeroplanes. Though they found a better price could be obtained by selling to the Eton boys direct. It meant they had to be delivered at night and lowered a string down for the models then to be taken upstairs and then eventually paid them somehow or the other, but they had to avoid attracting the attention of course of the school authorities.

**Becky:** In 1912, Sydney Camm and his friends from the model aeroplane club created a full-sized glider in a building on Alma Road. Bob has researched the endeavour and discovered that the father of his school friend was the test pilot of the glider.

**Bob:** This is something which I think is so interesting. It's something that I actually researched and found out for the Sydney Camm Society. They were so pleased I did. What I did was, I found out that Ginger Stanbrook's son, Ted Stanbrook, was at school with me and he went into eventually not Bomber Command but fleet air arm. In any case he actually was so surprised when I met him at school and I said 'Do you realise that your father crashed in Sydney Camm's very first test flight?'. Well the story is of course that they built this glider. It was a glider originally and they were waiting to put the engine in. Now the workshop where Camm constructed it is commemorated there, so carrying on now to explain one thing that did happen which nobody else knew about they made this 32 foot glider and they were going to try and put an engine in it eventually but they couldn't afford an engine so they thought okay this is the beginning we'll put it as a glider and the engine we can put in later and they knew where they could get that. It almost had been ordered; I think. They knew it had to be towed up

## Podcast by Windsor & Royal Borough Museum

in the air. They thought they'd just make sure they could get it up as a glider in the Home Park just with the Castle in the background. They towed it and the first person they chose was one of the Camm brothers who was considered too young so Ginger Stanbrook was always good, that's my friend's father, was always adventurous, he said 'no I'll do it' and of course he did. It went up in the air with the boys pulling. Then he crashed in full view of Windsor Castle and broke his collar bone. Now when I met Ted Stanbrook later on in life, I said to him as an old Windsorian, I said to him did you know that your father was the first test pilot for Sydney Camm long before the hurricane and Harrier jump jet. He said, 'I don't know what you're talking about, he was a member of the model aeroplane club'. I said, 'He crashed and broke his collar bone' and he said 'Well I never! He never admitted that to me at all. He probably was ashamed that he crashed'.

**Becky:** In 1914 Sydney Camm joined Martynside in Brooklands, a British aircraft and motorcycle manufacturer. There he was a woodworker and developed the skills he had learnt from his father who was a carpenter. At Martynside he gained experience of working on aircraft designs, before joining the Hawker Aircraft Limited in 1923. He worked his way up to becoming Chief Designer, a position he retained until his retirement in 1965. During this time, he designed planes including The Fury, The Typhoon, The Tempest, The Hunter and The Harrier, which was a vertical take-off and landing aircraft. He became one of Britain's most distinguished aircraft designers and was knighted in 1953.

He certainly achieved many accolades through his lifetime, but it was in Windsor that he found his love for aeronautics and developed his knowledge. This was noted in a discussion in 2016 between local historian Roger Cullingham, oral historian Stephen Simmons and the late worshipful Mayor of the Royal Borough of Windsor and Maidenhead, Councillor Eileen Quick. Eileen Quick's family were friends with Patrick Young Alexander, a meteorologist and aeronautical engineer who travelled the world and in 1917 began teaching aeronautics at the Imperial Service College in Windsor, and likely taught Sydney Camm.

**Stephen:** Did your father have, or your family have, any knowledge of or association with the Camm's, Sydney Camm?

**Eileen:** No, I don't think so. I believe that Sydney Camm may well have crossed over in some way with Mr Alexander but not any direct contact other than knowing that he was a local boy and he was working away on aeronautics locally but no.

## Podcast by Windsor & Royal Borough Museum

**Stephen:** Yes, there is some suggestion that Patrick Alexander gave some money to Sydney Camm's model aeroplane club when they run short of funds and they were going to shut down.

**Eileen:** Well I do remember being told that they actually made use of, and I don't know this is correct, but one of the aeronautic labs down at the Imperial Service College but I don't know whether that is accurate or not.

**Stephen:** But if he did, Sydney Camm put it to jolly good use.

**Eileen:** He certainly did.

**Stephen:** Okay so your father didn't have direct Association with the Camms.

**Eileen:** No, no.

**Roger:** Could I just make the point that Camm's father was a carpenter and obviously a very good one. Victorian skills were really drilled into people and they understood the importance of doing a job properly so Camm would have been aware of that. He would have used his carpentry skills making his models and you were saying earlier about the access to the school rooms or laboratories that Alexander had funded. I suspect that in quite a small knit community everyone would have known each other and as a young boy Camm would have come across boys from Imperial Service College and this interaction between them, I think it all helps to build an experience feeding off each other and leading up to what Camm achieved later.

**Eileen:** Yes, and Windsor was quite a small town then in the size of population, much more based around the centre of town without the bigger housing developments that have subsequently happened in the west of Windsor.

**Roger:** Right yes pre 1930s expansion.

**Eileen:** Yes so they almost certainly would have come across each other.

**Roger:** Yes I think so, I think it's very likely.

## Podcast by Windsor & Royal Borough Museum

**Stephen:** Any thoughts as to why aviation and aeronautics should have developed so far and fast in Windsor? I read a few things but any thoughts as to why that happened?

**Eileen:** Hmmm, that's a very interesting question. I wonder if there was perhaps a Royal influence. I know that certainly when the first airmail took off, was it Hendon to Windsor or Windsor to Hendon? I'm not sure which way around (Roger: Hendon to Windsor) it was very much supported and watched by the Royal family at the time when they landed in Windsor.

**Stephen:** There was an earlier suggestion that one of the Kings invited the Montgolfier brothers to fly their balloon after which the army realised this could be a useful device for spotting cannon and range finding and all sorts and the army had a balloon school I think in Windsor. So, a balloon going up and down on training flights was a common occurrence and possibly Sydney Camm and Patrick Alexander would have seen this and that idea might have been the seed for all this development.

**Eileen:** It could well be.

**Roger:** Well we do have Balloon Meadow so that perhaps would be linked into that but I don't have any knowledge on it myself.

**Eileen:** Interesting though. There must be something behind it that started the whole thing off in young boys' minds as something exciting and adventurous, a new dimension to explore.

**Roger:** You also had Hamel's flights around the Castle. Again, I forget the date but I guess it was around 1911 or a year or two later but he looped the loop over the Castle for the King's entertainment. There was quite a famous picture of the aircraft at a strange angle over the Round Tower not under complete control [laughs] but he said so anyway.

**Eileen:** Well they always said the early pilots flew by the seat of their pants.

**Roger:** Indeed. Well I'm sure the Royal patronage and Royal interest, George V was very keen on this sort of thing so he would have developed and encouraged it I'm sure.

**[end of oral history clip]**

## Podcast by Windsor & Royal Borough Museum

**Becky:** Many local people are proud that Sydney Camm was from Windsor and the community has ensured that his legacy will not be forgotten. The installation of a full-size replica Hawker Hurricane in Alexandra Gardens was organised by the Sydney Camm Commemorative Society in 2012. Former Mayor Eileen Quick and Roger Cullingham discuss why the location was chosen.

**Eileen:** It's great now to be able to walk down by the River and see the, is it lifestyle size or three-quarter size model? (Roger: full size one I believe) Yes, when you're actually a little bit away from it in Alexandra gardens and you look across, I think that's the best view of it. It looks as though it's just taking off.

**Roger:** Which is actually pointing at Camm's house apparently.

**Eileen:** Oh is it? What a nice touch.

**Roger:** Yes, that was the idea, yes, angled towards his house, which was going to be knocked down a few years ago to make a roundabout which my father was extremely angry about and it survived. I love this story and I know Alexander would have loved this story too that when the newspapers, and it got in the national papers, heard of the threat to Camm's house, the designer of the Hurricane and when Mitchell and the Spitfire were well regarded and remembered in several places in the country, Camm had not been particularly and when the report came that his house, not where he lived currently but where he had been born, was under threat of demolition, this German guy Everard who apparently was a Second World War pilot, wrote to the Telegraph and said 'How dare you? You have this great man, this great designer who fought the Luftwaffe and you want to knock his house down?'. So, Everard was more than a little concerned at what was going to happen in Windsor.

**[End of oral history clip]**

**Becky:** There is also a plaque on the former home of Sir Sydney Camm. Local historian, Dr Brigitte Mitchell, was involved in saving the building from demolition. She was born in Germany and witnessed the Allied troops marching through the Ruhr. She recalls her emotional connection with the Hawker Hurricane.

**Interviewer:** Brigitte, you have a particular wartime memory that you would like to talk about?

## Podcast by Windsor & Royal Borough Museum

**Brigitte:** Yes when I was about just four years old, right at the end of the war, we were aware that the Allied troops were marching in and where we lived on top of the Hill overlooking the Ruhr you could look down into the Valley and actually see the troops and my mother and the older siblings had gone down there. I was on my own sitting on the swing at the back of the house and our maid was in the house with the baby and I heard at first an aircraft approaching and I kind of looked up and I saw very very close at an angle, a small aircraft flying. I could see the pilot with his leather helmet or cap and I thought he hadn't done up his chin straps because they were hanging down by the side of his face. I later on discovered that's what they looked like and I saw this man in the aircraft and I was frantically waving at him. I wanted him to notice me and he didn't. He was just too intent on what he was doing and a little while later I could hear, I don't know if it was the same or another aircraft approaching, and at that moment our maid had realised what was going on outside and she came out and dragged me off the swing and we rushed into a little Woodland that we had the other side of the house and there we had a dugout and I was most incensed.

**Interviewer:** And this was part of the Allied advance into Europe?

**Brigitte:** Yes, the Allies had crossed the Rhine and they were going through the Ruhr marching towards Berlin and it would have been in late April 1945.

**Interviewer:** Right and what age were you then?

**Brigitte:** I was four and two months.

**Interviewer:** What feeling did you have seeing this Allied plane?

**Brigitte:** I was delighted. I only remember as a child 'oh there's an aircraft'. I'd never seen one close up like that. We'd watch the aircraft coming in over the Dutch border on bombing raids but we'd never been made, my mother never sort of worried us about it. We never got any fear translated from our parents about what was going on. It was very positive and tried to keep us cheerful, so I wasn't worried at all. I was just annoyed that the pilot didn't wave back. But the next time I actually saw this same aircraft was when I came to England in 1960 and I went to a museum and I can't remember which one it was now but there was one of these hanging from the ceiling. I always thought that it was a Spitfire. When I later learnt about aircraft, I thought it must have been a spitfire I'd seen but when I saw this aircraft, I thought ah that's the one I saw. It looked exactly the same with the man with the leather straps hanging down



## Podcast by Windsor & Royal Borough Museum

and it was the same sort of angle that I saw it and then I realised that it wasn't a Spitfire, it was the Hurricane.

**Interviewer:** And of course the hurricane has a strong connexion with Windsor?

**Brigitte:** Yes when I came to Windsor, I realised, there is my aircraft and he became my hero.

**Interviewer:** So you recognised when you saw the replica of the Hawker Hurricane that it had features you remembered from your sighting in Germany?

**Brigitte:** I did remember it very clearly and I also looked at the Spitfire and realised it couldn't have been a Spitfire because I wouldn't have seen the pilot from that angle because the pilot sits a little further back on the Spitfire.

**Interviewer:** Did you become involved in any of the moves to save Sir Sidney Camm's house later on?

**Brigitte:** ohh yes absolutely yes. I was on the barricades for that.

**Interviewer:** I think there was a story at the time because the house where he had been born was due for demolition. Is that true?

**Brigitte:** Yes, the whole road was due for demolition and they were going to build a car park there and I was on the barricades about that. It was bad enough to lose the place where he actually built his early aircraft which is now Ward Royal where there is a plaque. It was a shame that was lost.

**Interviewer:** The local history society was instrumental in saving the house?

**Brigitte:** Yes, well it was not the history society but the friends. A lot of people, Friends of Camm. It was a mixed group but I immediately got myself involved with anything to do with history because I started doing my research when I immediately came to Windsor and I think it was more the Friends of the Museum and there's a plaque now on the house. There's a plaque there now yes.

**[End of oral history clip]**

## Podcast by Windsor & Royal Borough Museum

**Becky:** Sir Sydney Camm had a brilliantly innovative mind and is remembered as one of Britain's most distinguished aircraft designers, and this Battle of Britain Day we are remembering his contribution to Britain's victory over the Luftwaffe.

But we are also remembering the numerous other individuals, including the skilled and brave pilots from across the Commonwealth and occupied Europe who defended the skies. And we must not forget the role played by those on the ground, including the observer corps tracking incoming raids, the anti-aircraft gunners, members of the Women's Auxiliary Air Force (WAAF) who worked as radar operators and worked as plotters, and the many who worked in factories producing aircraft, including at the Hawker Aircraft factory in Langley where Hurricanes were rapidly produced to Sir Sydney Camm's designs.

### [Music]

Thank you for listening to the Windsor & Royal Borough Museum's podcast to mark the 80<sup>th</sup> anniversary of the Battle of Britain. Look out for our next episode when we will again be telling local stories and sharing clips from our oral history collection.

In the meantime, follow us on twitter @windsor\_museum and find us on Facebook to have your regular fix of local history. You can also find more content from us on our website [windsormuseum.org.uk](http://windsormuseum.org.uk)